



THE EXPERTS ON DISEASE & PEST CONTROL

THRIP PROBLEM? CONTROL STRATEGIES

Importance

Western Flower Thrips (*Frankliniella occidentalis*) are known to vector plant pathogens such as Impatiens necrotic spot virus, and tomato spotted wilt virus. They cause stippling, scarring, silvering of the leaf surface, distorted leaves, and corky lesions on fruits by piercing leaves with one mouthpart and sucking the plant fluids through a stylet.

Control

Chemical control is challenging due to larvae deep inside buds being protected from insecticide sprays. Some growers add irritants like Captiva Prime to their tank mix in order to draw the thrips from hiding and into contact with insecticides. Soil applied systemics may not control thrips inhabiting flower buds and blooms, as movement of these materials into flower tissues is limited. Practicing resistance management is vitally important with this pest due to rapid life cycles and the potential of resistance development to overused control agents. Avoid resistance by rotating across the mode of action groups (MOA's).



Identification

Thrips are minute insects that have an elongated body shape. Adults have fringed wings while the immature stages are wingless, off white to translucent in color, 1/20 inch long. Feeding is evidenced by black specks of frass excrement. Scouting can be as simple as smacking a leaf over a white paper, or using yellow or blue sticky cards, then examining with at least a 10X hand lens.



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EFFECTIVE SOLUTIONS FOR THRIPS

Life Cycle

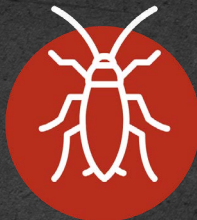
A typical life cycle is 21 days but can be as little as 14 days in high temperatures. Eggs are inserted into leaf tissue and deep in flower buds, followed by two larval stages, two non-feeding pupal stages which drop to the soil media, then adulthood.

Brand Name	BFG Item #	Active Ingredient	Mode of Action Group	Notes
Avid	SYN25873 SYN81141 SYN15128	Abamectin	6	Translaminar. Labeled for Greenhouse & Nursery.
AzaGuard	BSF700025 BSF7000-32OZ BSFT070001	Azadirachtin	UN	Insect growth regulator. Labeled for Greenhouse & Nursery as well as Fruits, Vegetables, and Herbs.
BotaniGard 22WP	CERT141104	Beauveria bassiana	UN	Contact. Soft on beneficial insects, labeled for Fruits, Vegetables, and Herbs.
Hachi-Hachi SC	SEPRO1159.464	Tolfenpyrad	21A	Contact. Labeled for Greenhouse & Nursery. Check label for plants to avoid.
Mainspring GNL	SYN58664 SYN66345	Cyantraniliprole	28	Translaminar & Systemic. Foliar or Drench Application. Soft on Beneficials.
Overture	VAL62120.084	Pyridalyl	UN	Contact and ingestion. Greenhouse use only. Soft on beneficials.
Pylon	BAS59012156 BAS59024027 BAS59012595	Chlorfenarpyr	13	Translaminar. Greenhouse use only. Vegetable label.
XXpire	DOW11080911	Spinetoram+ Sulfoxaflor	4C&5	Contact. Labeled for Greenhouse & Nursery.

Always read and follow label directions before applying any pesticide and follow state and local regulations.



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Biological Controls

These agents are the predacious mites *Amblyseius cucumeris* and *Amblyseius swirskii*, whose larvae feed on the eggs and immatures of thrips. Orius (Predatory bugs) are another agent that can be used.



Hachi-Hachi SC



64oz [SEPRO1159.464](#)

(Tolfenpyrad) MOA: 21A. Warning. 12HR REI. RATE: 21-32 Oz/100 gal. Contact. Labeled for Greenhouse & Nursery. Check label for plants to avoid.



Mainspring GNL



16oz [SYN58664](#)

1gal [SYN66345](#)

(Cyantranilprole) MOA: 28. Caution. 4HR REI. RATE: Foliar spray 2-8oz /100gal, drench 8-12oz /100 gal. Translaminar and systemic activity, soft on beneficial insects. Broad spectrum activity & lasting residual control.



Avid



8oz [SYN25873](#)

32oz [SYN81141](#)

1gal [SYN15128](#)

(Abamectin) MOA: 6. 12hr REI. RATE: 8oz/100gal. Translaminar movement. Controls adults and juveniles. Labeled for Greenhouse & Nursery. Avoid applications to ferns and shasta daisy.



Overture 35WP



11lb [VAL62120.084](#)

(Pyridalyl) MOA: UN. Caution. 12 HR REI. RATE: 8oz/100 gal. Contact and ingestion. A novel mode of action, makes it a great rotation partner. Enclosed greenhouses only. Translaminar within the leaf. Controls immatures and adults. Apply no more than 2 times per crop to manage resistance. Soft on beneficials.



AzaGuard



32oz [BSF7000-32OZ](#)

1gal [BSFTO70001](#)

2.5gal [BSF700025](#)

(Azadirachtin) Caution. OMRI. MOA: UN. 4hr REI. Rate: 10-16oz/100gal. Prevents molting, anti-feedant. Insect growth regulator. Labeled for Greenhouse & Nursery as well as Fruits, Vegetables, and Herbs.



Pylon



2oz TR [BAS59012595](#)

32oz [BAS59024027](#)

16oz [BAS59012156](#)

(Chlorfenapyr) MOA 13. Caution. 12hr REI. Rate: 5.2-13oz/100gal. Translaminar and contact. Controls adults and juveniles, not eggs. Labeled for greenhouse only, including vegetables. Check label for plants to avoid.



BotaniGard 22WP



11lb [CERT141104](#)

(Beauveria bassiana) MOA UN. Caution. 4 HR REI. RATE: 16-32oz/100gal. A naturally occurring fungal spore that quickly infects the target insect. Spray must contact pest. Soft on beneficial insects, labeled for Fruits, Vegetables, and Herbs.



XXpire



11lb [DOW11080911](#)

(Sulfoxaflor and Spinetoram) MOA: 4c & 5. Caution. 12hr REI. Rate: 2-2.75oz/100gal. Contact. Labeled for Greenhouse & Nursery.